



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,252	09/21/2001	David L. Brugman	LUT 2 0078 Brugman 2-2-2-	4331
7590	12/27/2004		EXAMINER	
Richard J. Minnich, Esq. Fay, Sharpe, Fagan, Minnich & McKee, LLP 1100 Superior Avenue Seventh Floor Cleveland, OH 44114-2518			AL AUBAIDI, RASHA S	
			ART UNIT	PAPER NUMBER
			2642	
DATE MAILED: 12/27/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/960,252	BRUGMAN ET AL.
	Examiner	Art Unit
	Rasha S AL-Aubaidi	2642

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 31 August 2004.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-24 is/are rejected.
- 7) Claim(s) 1-12 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____

Response to Amendment

Claim Objections

1. Claim 1 is objected to because of the following informalities: claim 1 recites the limitation "monitor connection" on page 3, line 6 of the amendment filed 08/31/2004. It is unclear to the examiner by using the limitation "monitor connection" whether the applicant is claiming a "connection" or a "monitor". It is believed that applicant is attempting to claim a "monitor" not a "connection". Also, on the same page, line 6 the limitation "out of band" should be changed to "out-of-band".

Claim 13 recites the limitation "out of band" on page 4, line 21. This limitation should be changed to "out-of-band". Same scenario should be applied to claim 22, which recite^s the limitation "out of band" on page 6, line 4. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:
- The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is not understood because the components "host telecommunications switch", "controller", "PSTN", and "RSM" appear to be unrelated. For example, it is unclear how the PSTN and the RSM relate to the other components.

Dependent claims 2-12 are rejected for the same reason because they depend from rejected claim 1.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patel in view of Hamlen (US PAT # 5,488,655).

Regarding claim 1, Patel teaches an apparatus comprising: a monitor connection (the "monitor" reads on emergency call monitor 110 in end office 102, Fig. 1) for receiving out of band signaling (reads on SS7, see col.3, lines 22-23) from a host telecommunications switch (reads on 911 office 104, Fig. 1), and a controller (reads on processor 202, see Fig. 2 and col.3, lines 55-63) coupled to the monitor connection (see Fig. 2, processor 202 is coupled to call monitor 204) configured to monitor traffic (see col.3, lines 55-63) between the publicly switched telephone network (between telephone 112 and end office 102, PSTN is inherent but not shown, see col. 2, lines 55-58) and a remote switching module (RSM reads on PSAP 106, see col.2, 51-53).

Patel does not exactly teach that when the controller monitors the traffic between PSTN and RSM it compiles usage data as well.

However, Hamlen teaches controlling the traffic in selected links of the Public Switched Telephone Network (PSTN). The number of selected PSTN links, which are available for use, are determined at a predetermined time through the use of an appropriate traffic measurement system. Thereafter, a customer usage rate is determined for the selected PSTN links. The determined rate corresponds to the number of selected links, which are available for use. An electrical signal is generated

for receipt by the user and which contains information corresponding to the determined customer usage rate (see abstract and col. 5, lines 31-49).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the feature of determining a customer usage rate, as taught by Hamlen, into the Patel system in order to provide statistics, which may enhance the efficiency of the system.

Claims 13 and 22 are rejected for the same reasons as discussed above with respect to claim 1. Also, the claimed limitation of “computer program product” as recited in claim 22 reads on the software program that runs on the switching module 402, see col. 5, lines 5-11.

Claim 2 is rejected for the same reasons as discussed above with respect to claim 1. In addition, the claimed “umbilical link” reads on trunk 114, see Fig. 1, col. 2, lines 51-53, and col.3, lines 17-22).

Claims 3 and 16 recite the limitation of a “controller is configured to monitor called number information within out of band signaling from the host telecommunications switch”. Basically all calls information including calling origination information and called destinations information must be analyzed and treated. Therefore, monitoring the called number information is inherent; see also background of

the invention.

Regarding claim 4, Patel teaches the controller (204, Fig.2) is configured to monitor (via the monitor 208) calling number information within out of band signaling from the host telecommunications switch (this simply reads on determining the call type, such as 911 calls, see col.4, lines 11-30 and col.5, lines 10-23).

Regarding claims 5 and 17, Patel teaches the controller is configured to monitor originating point codes within the out of band signaling from the host telecommunications switch (see col.5, lines 9-28).

Regarding claim 6 and 18, Patel teaches the controller is configured to monitor destination point codes within the out of band signaling from the host telecommunications switch (this reads on monitoring if this is a 911 call or not).

Regarding claim 7, Patel teaches the controller (202) is configured to report incoming usage ("track the progression of the calls") to the remote switching module from all other switches within the PSTN.

Claims 8-9 and 19-21 are rejected for the same reasons as discussed above with respect to claim 7.

Regarding claim 10, Patel teaches the controller is configured to report usage of the umbilical link for calls between lines terminated by the remote switching module (see col.3, lines 29-39).

Regarding claims 11-12, Patel teaches the controller (202) is configured to report total usage related to each originating point code for calls terminating at the remote switching module (see col.4, lines 18-41).

Regarding claims 14-15 and 23-24, Patel teaches the controller (202) compiling call related data associated with the calls of interest and providing reports related to the calls of interest (this reads on tracking the call records and determining the type of call and whether it is a emergency call or not, see col.3, lines 55-63).

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yost et al (US PAT # 6,256,490) teaches statistical analysis of a traffic history between a base station and mobile switching center (see abstract of the invention).

Nolting et al (US PAT # 6,298,123) teaches traffic tracking and analysis. The analysis preferably entails analysis of usage data and traffic patterns (see abstract).

Mottishaw et al (US PAT # 6,721,284) teaches generating service detailed record, which is created for telephone service carried over a packet data network (see abstract). Mottishaw also teach there is detailed service usage information in the service records, which can be provided to customers for use in their internal accounting (see col. 8, lines 45-50).

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rasha S AL-Aubaidi whose telephone number is (703) 605-5145. The examiner can normally be reached on Monday- Friday from 7:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad F Matar, can be reached on (703) 305-4731. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Examiner

Rasha S. Al-Aubaidi

12/21/2004



AHMAD F. MATAR
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2700